

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056**

In the matter of the petition of

Air Medic

for an exemption from §§ 25.561, 25.562
and 25.785(b) of the Federal Aviation
Regulations

Regulatory Docket No. 28689

PARTIAL GRANT OF EXEMPTION

By letter dated September 6, 1996, Mr. Marvin Keogh, owner, Air Medic, petitioned for an exemption from §§ 25.561, 25.562 and 25.785(b) of the Federal Aviation Regulations (FAR) to the extent necessary to permit certification of medical stretchers for transport of persons whose medical condition dictates such accommodation. The exemption is for Boeing Model 777 airplanes and Airbus Model A330 and A340 airplanes.

Sections of the FAR affected:

Section 25.785(b) requires that each seat, berth, safety belt, harness, and adjacent part of the airplane at each station designated as occupiable during takeoff and landing must be designed so that a person making proper use of those facilities will not suffer serious injury in an emergency landing as a result of inertia forces specified in §§ 25.561 and 25.562. It must be noted that the provisions of current § 25.785(b) were contained in § 25.785(a) prior to Amendment 25-72. Insofar as this petition is concerned, § 25.785(a), as amended by Amendment 25-64, applies to Airbus Models A330 and A340, while § 25.785(b), as amended by Amendment 25-72, applies to the Boeing Model 777. There were no substantive differences between the two paragraphs. Stretchers are considered “berths” insofar as compliance with this section is concerned.

Section 25.561 specifies the emergency landing static load conditions for structural retention.

Section 25.562 specifies dynamic test conditions for qualification of occupant injury criteria, as well as structural retention criteria.

The petitioner's supportive information is as follows:

The petitioner notes that there are numerous supplemental type certificates granting installation approval for the Air Medic stretcher covering most large transport airplane types. The petitioner states that the certification requirements in effect for those airplanes have resulted in a good service history with no adverse experience. No stretcher installations have been shown to meet the dynamic test criteria.

The petitioner notes also that the estimated cost of demonstrating compliance of stretcher installations with the dynamic test requirements is quite high considering the limited number of units for which it could be amortized. Since none have been shown to comply with the dynamic test criteria, stretchers can not currently be used on airplanes whose type-certification bases includes the dynamic test requirements. In this case, a person who needs to travel for essential medical care can either charter an airplane, at 5-10 times the cost of a commercial ticket, or if the cost is prohibitive, fail to receive the needed treatment (the consequences of which may be fatal.)

The petitioner feels that the granting of the petition would be in the public interest for the following reasons:

- (a) The exemption would relieve an economic burden on a segment of the traveling public already dealing with adversity,
- (b) The level of safety that would be provided is an acceptable level of safety given the limited usage and exposure of the stretcher, and
- (c) Compliance with the dynamic test requirements would be difficult at best, and very expensive, while returning a marginal safety benefit.

The petitioner also requests that publication of this petition for public comment be waived for good cause. Due to a misunderstanding, the petitioner believed that the dynamic test requirements were not applicable, and therefore did not petition sooner. Any delay in granting the exemption exacerbates the situation where persons are unable to travel to receive needed medical care.

The FAA finds, for good cause, that action on this petition should not be delayed by publication and comment procedures for the following reasons: (1) the petitioner had made a good faith effort to comply with the applicable regulations but, due to a misunderstanding, had been working under the assumption the dynamic test requirements were not applicable; (2) a delay in acting on the petition would be detrimental to the petitioner, as well as effectively deny a valuable service to persons with critical medical conditions.

The FAA's analysis/summary is as follows:

Due to humanitarian considerations, the FAA considers the transportation of persons needing medical attention by air to be essential and in the public interest. In many instances those persons can only be transported on stretchers.

The petitioner has requested relief from § 25.785(b) which currently contains the requirement for berths to provide adequate occupant protection under the inertia loads of §§ 25.561 and 25.562. This requirement was contained in § 25.785(a) prior to Amendment 25-72. Since § 25.785(a), as amended by Amendment 25-64, is the pertinent requirement for the two Airbus models, the FAA will assume that the petitioner intended to request relief from that section for those two models. The FAA agrees that the requirement to consider the inertia loads of § 25.562 for other than seats is not altogether obvious. Since § 25.562 refers to “seats,” it would be easy to overlook the applicability of that section to berths through its incorporation by reference in § 25.785. In addition, other FAR parts do not treat berths in the same manner as part 25, and this could also lead to confusion. In any event, occupancy of berths during takeoff and landing for *ambulatory* persons was not considered feasible under the conditions of § 25.562; occupancy by non-ambulatory persons was not addressed.

The FAA agrees that demonstrating compliance with the requirements of § 25.562 would be very difficult, and applicability of the existing pass/fail criteria is questionable.

The FAA has also considered the cost implications and overall benefits resulting from the use of stretchers. One possible alternative, in the absence of the relief requested by the petitioner, would be to seek a less desirable airline routing or schedule utilizing an airplane that is not required to comply with the dynamic test requirements. That alternative, if available, would not offer any safety benefit since the stretcher installation would still not be required to meet the dynamic test criteria. Should that alternative not be available, a person would be forced to charter an airplane at a cost likely to be prohibitive. Any safety benefit from requiring a stretcher installation to meet the dynamic test requirements would certainly be moot if the necessary medical attention were unavailable due to prohibitive costs.

The need for stretchers in transport category airplanes is very infrequent. The exposure of persons occupying stretchers to a possible accident is, therefore, considerably less than for airline passengers in general. Since only those persons whose medical condition dictates travel in a stretcher can use the stretcher during takeoff and landing, granting the requested relief would not set a precedent for the traveling public in general.

Although relief from the provisions of §25.561 was also requested, the petitioner did not provide any justification for such relief and apparently intends to comply with all of the provisions of that section. Since § 25.561 is incorporated by reference in §25.785, the

petitioner may have requested such relief in the mistaken belief that it would be needed in order to realize the expected relief from § 25.785. In any event, that portion of the petition is denied because there is no apparent justification for relief from the provisions of § 25.561.

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest, and will not significantly affect the overall level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 USC 40113 and 44701, formerly §§ 313(a) and 601(c) of the Federal Aviation Act of 1958 as amended, delegated to me by the Administrator (14 CFR 11.53), the petition of Air Medic for exemption from the requirements of § 25.785(a), as amended by Amendment 25-64, or § 25.785(b), as amended by Amendment 25-72, as applicable to the particular airplane model involved, and from the requirements of § 25.562, is hereby granted for the installation of stretchers in Airbus Model A330 and A340 airplanes and Boeing Model 777 airplanes provided:

Occupancy for takeoff and landing is limited to non-ambulatory persons. Suitable means to identify this limitation shall be provided as part of the stretcher type design.

In consideration of the foregoing, the petition of Air Medic for exemption from the requirements of § 25.561 is hereby denied

Issued in Renton, Washington, on October 3, 1996

/s/

Darrell M. Pederson
Acting Manager
Transport Airplane Directorate
Aircraft Certification Service